



Three cases of *Abdominal Section* for unusual conditions :—(a) *Tubercular disease of the liver*; (b) *Complete volvulus and strangulation of the great omentum*; (c) *Traumatic hæmorrhage without external wound*. By A. W. MAYO ROBSON. Read January 11, 1895.

I MUST apologise for giving in the same paper the three following dissimilar cases, as they only resemble one another in the fact that they were all treated by abdominal section, which in each case resulted in complete recovery. I venture to hope, however, that each may be found to present points of interest sufficient to occupy the time of the Society for a few moments.

CASE 1. *Tubercular abscess of the liver*.—G. R., æt. 31, a miner, was admitted to the infirmary on October 17, 1892, with the history of having been perfectly well up to twelve months before, when he commenced work in a damp mine, and immediately began to suffer from intermittent attacks of pain in the right knee and in the back. He was able to follow his occupation up to the 28th of March, 1892, when at 4.30 in the morning, while walking to his work, he felt a sharp pain in the epigastric region, which gradually increased in severity up to 12 o'clock, at that time becoming so severe as to necessitate his ceasing work. The pain was intensely agonising, causing him to roll about on the floor with the body doubled up. There was no accompanying vomiting or jaundice. There had been no recurrence of the intense pain, but a dull aching had been more or less constantly present, entirely preventing him working.

Three months prior to admission he noticed a lump at the seat of the pain; this had steadily increased in size. There had been a slight tendency to jaundice during the four months preceding admission, and epistaxis had occurred once or twice a week during the same period. His general health had failed, and he had lost half a stone in weight since June. No cough was present, but there were frequent night sweats.

When admitted under the care of Dr. Churton, the patient complained of a dull aching pain in the epigastrium, also high up between the shoulders, as well as in the left shoulder and

over the spine of the right scapula. To the right of the middle line in the upper epigastric region there was a smooth rounded tumour the size of an orange, apparently connected with the liver. Nothing abnormal was discovered in any of the other organs.

No improvement having occurred under medical treatment the patient was transferred to the surgical wards, and on October 22, 1892, the surface of the abdomen having been thoroughly cleansed, a vertical incision two inches long was made over the swelling just below the right costal margin. The liver was found adherent to the parietes, and the abscess cavity was opened as soon as the latter were cut through. A large quantity of pus and caseous matter was removed with a lithotomy scoop, and the space having been well washed out, iodoform was rubbed into its walls, a drainage-tube inserted, and the upper part of the wound closed. The stitches were removed a fortnight later, the upper part of the wound being firmly healed, and the tube two days later, a very small amount of discharge being present at each dressing.

A small sinus persisted for a time, from which a few drops of pus were discharged daily, but the patient's general health improved rapidly, and he was discharged on December 28. When seen in June, 1893, he was in good health, the fistula having healed, leaving a healthy scar.

The report of the Pathologist states that the material removed was shown by microscopic examination to be tubercular.

For the notes of the case I am indebted to my late house surgeon, Mr. A. L. Whitehead.

That the condition of tuberculosis of the liver as an independent affection is a rare one the following references would seem to prove; but that a radical treatment is promising is amply demonstrated by the present case, as I believe the patient is now in perfect health.

Taylor (*Manual of Medicine*, 2nd edit., p. 633) says tubercle of the liver is almost invariably a part of general tuberculosis.

Dr. Smith (*Quain's Dictionary*, art. "Liver, Morbid Growths of") repeats the same.

Dr. Roberts (*Theory of Medicine*, p. 714) says tubercle is usually found only in connection with acute miliary tuberculosis, but is occasionally secondary to chronic tubercular diseases elsewhere.

Osler (*Theory of Medicine*, p. 242) mentions that though most commonly found in acute miliary tuberculosis, still large caseating masses are occasionally found.

Pye-Smith (Fagge's *Principles of Medicine*, 3rd edit., p. 392) says that a large caseous tubercular mass, softening into a pseudo-abscess, is one of the rarest pathological curiosities, and he thinks that some of the few recorded cases are of actinomycotic origin.

CASE 2. *Complete volvulus, with strangulation of omentum, producing acute peritonitis.*—R. B., æt. 35, was admitted to the infirmary on March 1, 1892, almost in a state of collapse from acute abdominal pain, the abdomen being distended and exquisitely tender. His pulse was 120 and intermittent. There was not complete obstruction, as he had passed flatus quite recently. He said that he had suffered from a left inguinal hernia for six years, and although he had worn a truss the rupture occasionally came down, but was easily reduced. Four days previously while doing some heavy work the rupture descended, and was reduced with a certain amount of force; but after reduction, which was unaccompanied with a gurgle, the abdomen was more painful than usual, and in fact he was so much distressed that he had to cease work, but his bowels were moved the same afternoon. The following day the pain had increased, but flatus passed freely, and there was no vomiting. On the third day vomiting came on, and persisted up to the day of admission.

On examining the abdomen little could be made out on account of the great tenderness and distension. On passing the finger, by invaginating the scrotum, up the left inguinal canal, which was very patent, a hard tender mass could be touched within the internal ring.

After a consultation of the surgical staff, who were all present at the time of operation, the abdomen was opened in the middle line below the umbilicus, when it was discovered that the great omentum, attached below to the inguinal canal by a cord about the thickness of a penholder, and above to the lower border of the stomach by a similar cord, had completely revolved several times on its axis, thus forming a large hard mass, which was passing from a state of congestion to one of strangulation. The two cords above and below presented several twists, and after division of these the mass of omentum was removed.

A quantity of sanious peritoneal fluid was removed by

sponges, and the peritoneum closed after ligaturing the aforementioned pedicles,—not because they were bleeding, but as a precautionary measure.

After removing the mass it was found to consist of the whole of the omentum except the small fan-shaped portion coming down from the stomach to the upper twisted cord.

After the operation there is nothing special to record. The wound healed by first intention, and the patient was allowed to be up on the 20th of March, and was discharged on the 26th.

So far as I know the case is unique, and I think that in all probability a correct diagnosis was impossible. The whole staff agreed with me in thinking there was strangulation of omentum in a hernial sac which had been reduced *en masse*, the free passage of flatus clearly indicating that the bowel was free from strangulation.

It clearly demonstrates the importance of operating in doubtful cases of peritonitis, although the cause may be undiagnosed, as indeed it is frequently undiagnosable.

CASE 3. *Traumatic intra-peritoneal hæmorrhage treated by laparotomy with lavage and drainage.*—On July 18 the patient, James H., æt. 13, was attacked by a bull in the cattle market. The beast pushed him against some railings and fixed him there, its face being in contact with the boy's abdomen, and its horns on either side of him. When released he felt sickly and had abdominal pain, but walked home, a distance of half a mile, without help. His friends put him to bed, but the abdominal pain continued, and he began to vomit. Late in the evening of the same day he was admitted to the Leeds General Infirmary. He looked very ill, face pinched and pale, thighs flexed on abdomen, pulse 130, temp. 100°. The abdomen was fairly full, with dulness in both flanks; there was slight general tenderness. He passed a little urine full of urates. Liver dulness present. There was bruising of the back in the lumbar region, extending outwards to the left loin.

Next morning his temperature was normal, the pain continued, the abdomen was much fuller, and the dulness more extensive in the flanks, now extending into the iliac and hypogastric regions; fluid thrill; pulse 128, small and feeble. The friends were telegraphed to for permission to operate, as the patient was rapidly getting worse, and there was mani-

festly internal hæmorrhage. Early in the afternoon the abdomen was opened by an incision $1\frac{1}{2}$ inches long in the linea alba midway between the umbilicus and pubes. Bright red fluid blood gushed out, of which two pints were measured. The peritoneal cavity was flushed with about ten pints of hot saline solution, but his pulse became so rapid and feeble, in fact almost imperceptible, that it was decided to trust to drainage to stop the bleeding, as it was manifest that if the operation were prolonged the patient would die on the table; hence, although the lotion returned from the abdomen deeply stained with blood, a glass tube was put in to drain the pelvis, and the wound was closed. When he left the theatre the pulse was 150. Half an hour after, 2 ounces of deeply stained fluid were removed through the tube. At the second dressing, an hour later, 1 ounce of similar fluid, and at the third dressing, two hours later, only 3ij, and four hours later again 3ij.

Next morning, July 20, at 9 A.M., 3ij of clearer fluid were withdrawn, and at 12 noon 3j was removed and the tube taken out.

His temperature was 98° and his pulse 112, and although he looked ill and pale, he was comfortable and cheerful. He had passed urine, and the abdomen was quite flat. The case progressed very favorably, and he got up on August 9, and went home on August 11, walking to the front door with ease.

On September 8 he was seen at "out-patients," looking very well.

The case illustrates very forcibly the hæmostatic effect of washing out with hot solution combined with drainage, and demonstrates the fact that in some cases of intra-peritoneal hæmorrhage where the patient is too ill to bear a prolonged operation this simple method may still save life by first emptying and then keeping the peritoneal cavity emptied, thus allowing coagulation to take place in the opened vessels.

